

REMARKS

Claims 2-3 and 9-10 have been canceled without prejudice. Claims 1, 4-8, and 11-14 remain pending in the application. Applicants amend claims 1 and 8 for further clarification, and refer to Fig. 5 and its corresponding description in the specification for exemplary embodiments of and support for the claimed invention. No new matter has been added.

Claims 1, 5, 8, and 12 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,754,473 to Choi et al.; claims 7 and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Choi et al. in view of Official Notice; and claims 4, 6, 11, and 13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Choi et al. in view of U.S. Patent No. 6,131,016 to Greenstein et al. Applicants amend claims 1 and 8 in a good faith effort to further clarify the invention as distinguished from the cited references, and respectfully traverse the rejection.

Again, the Examiner cited Choi et al. as allegedly disclosing the principal features of the claimed invention. In particular, the Examiner cited col. 5, lines 35-55 of Choi et al. as allegedly disclosing the claimed features with respect to fixing the control weight of an unselected antenna. Page 3, lines 1-14 of the Office Action. Such portions of Choi et al. only include, however, description of an antenna #1 being designated “as a reference antenna,” and an approximate phase difference index between vectors of the reference antenna #1 and another antenna #2 being calculated and transmitted back to a base station to set the weight of the antenna #2. Col. 5, lines 40-55 of Choi et al. Such portions of Choi et al. do not include any disclosure of selecting between antennas after difference indexes for such antennas have been transmitted.

As such, Choi et al., as cited and relied upon by the Examiner, fail to disclose the claimed features of selecting an antenna from a part of a plurality of antennas after receiving weighting information for the part of the plurality of antennas excepting a reference antenna,

and fixing a control weight of an unselected antenna from the part of the plurality of antennas for which weighting information is received.

In other words, Choi et al., as cited and relied upon by the Examiner, fail to disclose,

“[a] transmitting diversity system with a base station transmitting signals from a plurality of antennas and performing diversity transmission according to feedback data transmitted from a mobile node receiving the signals, comprising:

a signal condition detection unit detecting a condition of a signal transmitted from each of the plurality of antennas, wherein said feedback data including weighting information for only a part from among the plurality of antennas to be controlled excepting a reference antenna is received from the mobile node;

an antenna selection unit selecting an antenna, for which a control weight is calculated, from the part of the plurality of antennas based on said feedback data; and

a control weight unit calculating only the control weight applied to the selected antenna and applying the control weight to signals transmitted from the selected antenna, wherein

said control weight unit fixes the control weight of an unselected antenna from the part of the plurality of antennas to a current value,” as recited in claim 1. (Emphasis added)

Again, the claimed invention advantageously provides for feeding back weighting information only for a part of antennas, and thus, reducing the amount of feedback information for comprehensive control. The cited portions of Choi et al. only include description of determining respective weights of antennas based on differences of vector feedback for all antennas, and, thus, do not include any disclosure of such feedback reduction features.

Accordingly, Applicants respectfully submit that claim 1, together with claim 5 dependent therefrom, is patentable over Choi et al. for at least the above-stated reasons. Claim 8 incorporates features that correspond to those of claim 1 cited above, and is, therefore, together with claim 12 dependent therefrom, patentable over Choi et al. for at least the same reasons.

The Examiner relied upon Official Notice and Greenstein et al. to specifically address additional features recited in dependent claims 4, 6-7, 11, and 13-14, respectively. As such, they would have failed to cure the above-described deficiencies of Choi et al., even assuming, arguendo, that it would have been obvious to one skilled in the art at the time the claimed invention was made to modify Choi et al. based thereupon, as proposed by the Examiner. Accordingly, Applicants respectfully submit that claims 4, 6-7, 11, and 13-14, which depend from claims 1 and 8, respectively, are patentable over the cited references for at least the above-stated reasons.

In view of the remarks set forth above, this application is in condition for allowance which action is respectfully requested. However, if for any reason the Examiner should consider this application not to be in condition for allowance, the Examiner is respectfully requested to telephone the undersigned attorney at the number listed below prior to issuing a further Action.

Any fee due with this paper may be charged to Deposit Account No. 50-1290.

Respectfully submitted,

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